

100589-ELE-PT-E-1998
Senior Testing & Commissioning Engineer

Has about 13 years hands-on experience in design and testing of substation equipments; control and protection systems; design of control, interlocking, protection, command and alarm schemes; testing of protection relays; calibration of measuring instruments and troubleshooting in operating systems; installation of outdoor switchgear.

PERSONAL DATA

Nationality : Egyptian
Gender : Male

LANGUAGES

Arabic : Native Language
English : Good

COMPUTER SKILLS

: Windows, MS Office, Internet

CHRONOLOGICAL EXPERIENCE RECORD

Employer : Al Fanar – KSA
Job title : Senior Testing & Commissioning Engineer

Field of experience :

- Testing and commissioning of HV equipments like CT, VT, CB, DS.
- Complete testing of control and power cables. AC, DC supplies circuit checks, control, interlocking, alarm, indication and function checks.
- Testing and calibration of measuring instruments like voltmeters, amp meters, power meters, frequency meters, pf meters, power recorders, energy meters and transducers.
- Testing and commissioning of substation protective relays like O/C relays (SPAJ 140/ABB, KCGG142/ALSTOM, 7SJ52/SIEMANS, ARGUS/VATECH, etc.), distance relays (REZ1/ABB, 7SA511, 513,522/SIEMENS and OPTIMHO/ALSTOM), differential relays (RADHA/ABB, MBCI/ALSTOM, 7SD502L/SIEMENS, 7SS522/SIEMENS, REB 103/ABB, REB 500L/ABB, etc.).
- Testing of REROLLE (DUOBIAS_M diff relay, ARGUS1 DCD415A, DCD115A o/c relay, 5B3 R.E.F.) Relays.
- REROLLE (TR 214, TR 241) trip unit relay.
- REROLLE (XR 350) trip circuit experience.
- Special experience of all ABB Relays, very good knowledge how to dial with its software (CAB).
- Special experience of all SIEMENS Relays, very good knowledge how to dial with its software (DIGSI).

- Make complete commissioning & testing for SWITCHGEAR (ABB, SCHNEIDER) & give training course for SEC engineers in ABB switchgear in the site with all tests required & function, schemes check.
- Relays thermal over load relays, under / over frequency load shedding relays, trip circuit supervision relay, auto reclosure relays, transformer automatic voltage regulating relays, synchrocheck relays etc.
- Testing and commissioning of generator protective relays like V/HZ relays, synchronizing relays, voltage controlled over current relays, under / over frequency relays and generator differential relays.
- Operation of switchgears, motors and pump.
- Stability test of transformer differential schemes, bus bar differential schemes cable differential schemes, 1 and ½ bus bar arrangement schemes, single and double bus bar schemes and ring bus bar arrangement schemes.
- Design and testing of interlocking schemes, control and alarm schemes, synchronizing schemes, voltage regulating schemes, automatic change over schemes, bus bar scheme and breaker failure schemes.
- CT calculation, PT calculation, relay setting calculation, etc.
- Very good experience in working as trainer stricter (give SEC engineer protection courses), working with ABB too much time for this scope.
- Testing CT (polarity, turns ratio, insulation, winding resistance, loop resistance).
- Testing PT (polarity, turns ratio, insulation, winding resistance, loop resistance).
- Very good experience in doing primary injection test.
- Carry out of function, trip test & schemes check for GIS, RELAY & CONTROL PANEL, SWITCHGEAR.
- Good experience working as team leader for a group of testing & commissioning engineers & make schedule plane with the activities within its duration time.
- Reporting skills, negotiation skills, presentation skills.
- Testing equipments:
 - Primary injection ODEN/Programma.
 - Breaker analyzer TM1600/Programma.
 - Secondary injection SVERKER760/Programma.
 - Three phase secondary injection FREJA 300/Programma general relay testing set CMC256-6/Omicron.
 - High AC and DC general relay testing set CPC 100/Omicron.
 - High voltage injection set HIPOT/Hipotronic.
 - High voltage insulation and excitation set MAGNUS/Programma.
 - Low value micro ohm resistance test set MICRO/Programma.
 - Accurate resistance measuring set WHEAT STONE BRIDGE.
 - Energy meter calibration set with provision of pulse counter.
 - Infrared led detectors and position changing disk detector CMC265-6/Omicron.
 - Transformer TTR resistance, ratio, polarity and insulation testing set CPC100.

Other Skills & Qualifications:

- Sound experience in testing and commissioning of protection relay and control system.

- Experience in installation, testing and commissioning of electric work, high voltage and medium voltage switchgears.
- Experience in troubleshooting in protection and control schemes troubleshooting in operating equipments and devices.
- Skill in operation of static and digital relays, human man interface knowledge to communicate to relays by manual and computer operated software methods to change the operating setting as per system requirements.
- Knowledge in calculating and implementation the setting of distance relays o/c relays and diff relays.